

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Currently Amended) ~~The substrate cleaning apparatus according to claim 1,~~ A substrate cleaning apparatus comprising:

a processing bath to be filled with a cleaning chemical;

an ultrasonic oscillator disposed in the processing bath and immersed in the cleaning chemical; and

a retainer for retaining a substrate to be immersed in the cleaning chemical such that ultrasonic waves originating from the ultrasonic oscillator are radiated onto a back surface of the substrate,

wherein the ultrasonic oscillator has a plurality of oscillation sources disposed in a uniformly dispersed manner.

3. (Currently Amended) ~~The substrate cleaning apparatus according to claim 1,~~ further comprising A substrate cleaning apparatus comprising:

a processing bath to be filled with a cleaning chemical;

an ultrasonic oscillator disposed in the processing bath and immersed in the cleaning chemical;

a retainer for retaining a substrate to be immersed in the cleaning chemical such that ultrasonic waves originating from the ultrasonic oscillator are radiated onto a back surface of the substrate; and

a rotary mechanism for rotating the substrate retained by the retainer.

4. (Currently Amended). ~~The substrate cleaning apparatus according to claim 1,~~ further comprising A substrate cleaning apparatus comprising:

a processing bath to be filled with a cleaning chemical;

an ultrasonic oscillator disposed in the processing bath and immersed in the cleaning chemical;

a retainer for retaining a substrate to be immersed in the cleaning chemical such that ultrasonic waves originating from the ultrasonic oscillator are radiated onto a back surface of the substrate; and

propagation control apparatus for scattering or damping ultrasonic waves originating from the ultrasonic oscillator.

5. (Currently Amended) ~~The substrate cleaning apparatus according to claim 4, A~~
substrate cleaning apparatus comprising:

a processing bath to be filled with a cleaning chemical;

an ultrasonic oscillator disposed in the processing bath and immersed in the cleaning chemical;

a retainer for retaining a substrate to be immersed in the cleaning chemical such that ultrasonic waves originating from the ultrasonic oscillator are radiated onto a back surface of the substrate; and

a propagation control apparatus for scattering or damping ultrasonic waves originating from the ultrasonic oscillator, wherein the propagation control apparatus is constituted by means of placing, in a propagation path of ultrasonic waves, a plate-like member having a plurality of openings selectively formed therein.

6. (Original). The substrate cleaning apparatus according to claim 4, wherein the propagation control means includes jet nozzles for squirting a chemical in the propagation path of ultrasonic waves, thus circulating a flow of chemical.

7. (Cancelled)

8. (Withdrawn) A substrate cleaning method characterized in that a substrate whose surface has been processed is immersed in a cleaning chemical filled in a processing bath, and ultrasonic waves are radiated onto a back surface of the substrate, thereby cleaning a front surface of the substrate.

9. (Withdrawn) The substrate cleaning method according to claim 8, wherein ultrasonic waves originate from a plurality of origination sources disposed in a dispersed manner.

10. (Withdrawn) The substrate cleaning method according to claim 8, wherein the substrate is cleaned while being rotated.

11. (Withdrawn) The substrate cleaning method according to claim 8, wherein ultrasonic waves are radiated by way of a propagation control member for scattering or damping ultrasonic waves.

12. (Withdrawn) The substrate cleaning method according to claim 8, wherein cleaning is effected while the chemical through which ultrasonic waves propagate is stirred or agitated.

13. (Withdrawn) A method of manufacturing a semiconductor device through use of the substrate cleaning method defined in claim 8.